REMARKS/ARGUMENTS

Applicants have received and carefully reviewed the Office Action of the Examiner mailed January 25, 2005. Claims 1-16 are pending and claims 15 and 16 are withdrawn from consideration. Claims 7-9 have been amended to correct typographical errors. No new matter has been added. Reconsideration and reexamination are respectfully requested.

Information Disclosure Statement

Applicants filed a supplemental IDS that was received by the PTO on December 1, 2004 listing two US patents and one European patent. Applicants have not received a copy of the initialed 1449 and request the Examiner provide a copy with the next Office Action.

Allowable Subject Matter

Applicants thank the Examiner for stating that claims 6-14 are allowed and claims 3-4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Rejection under 35 U.S.C. § 103

Claims 1, 2, and 5 are rejected as being unpatentable over Zurek et al. (US 5,576,218). The Examiner asserts that Zurek et al. teach a motorized damper 28 with a vane 38 and first and second identical interchangeable ports 32, 34 provided for input and output modes. The Examiner further asserts that it would have been an obvious matter of choice to reverse the damper 28 during installation in order to install the damper without regard of ports so that the input and output ports may be reversed. Applicants respectfully traverse the rejection.

It appears the Examiner has misunderstood the term "port" as it is used throughout the instant specification and claims. Applicants submit that one of ordinary skill in the art, upon reading the instant specification and reviewing the drawings, would understand that the "port operable in an input mode or an output mode" recited in the claims refers to the connection point

for wires that carry the control signals to the damper, and does not refer to an airflow opening. The specification recites, at page 6, line 25 through page 7, line 11 (paragraphs 47-49 in published application):

> The controller 210 controls the actuation of the dampers 220, 230, and 240. For example, controller 210 can send a control signal, such as a command to open or close the damper vanes, over wire 215 to damper 220. When damper 220 receives the control signal at port 222, the damper 220 can both act on the control signal (e.g., open or close the damper vanes), as well as forward the control signal from port 224, over wire 225, to port 232 of damper 230. In a similar manner, damper 230 acts on the control signal and forwards the control signal from port 234 over wire 235 to port 242 of damper 240. Damper 240, in turn, acts on the control signal and can forward the control signal if a wire is coupled to port 244. In this manner, the control signal from controller 210 can be propagated to each damper 220, 230, and 240.
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> The ports of each of the dampers 220, 230, and 240 can function to both receive and send control signals. For example, the configuration of the air handling system 200 as shown in FIG. 3 is identical to the system 200 of FIG. 2, except that the ports 222 and 224 of damper 220 to which wires 215 and 225 are connected have been switched, so that damper 220 receives the control signal from controller 210 at port 224 and sends the control signal to damper 230 using port 222.
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> As illustrated by FIGS. 2 and 3, the ports of each damper, such as ports 222 and 224 of damper 220, preferably function in both an input mode and an output mode to receive and send signals.

In the instant damper device, air moves through the airflow opening 308, described at page 9, lines 21-29, and illustrated in FIG. 7. The ports recited in the instant claims thus have a different structure and different function than the airflow ports of Zurek et al.

Zurek et al. teach a thermal cycling apparatus in which the amount of warm and cold air sent to the mixer 42 is regulated by damper systems 28 and 30, each having air input ports 32, air output ports 34, and air return ports 36. See column 6, lines 24-34 and FIG. 2. Zurek et al. thus do not appear to teach or suggest ports operable either in an input mode or in an output mode, as recited in independent claim 1.

Applicants submit that the mere fact that Zurek et al. calls the airflow ducts of their system input and output "ports" does not impart any particular structural features other than those

specifically recited in the reference, i.e. directing the flow of air. Applicants submit that a complete reading of Zurek et al. and the instant specification gives one of ordinary skill in the art a clear indication that the input and output ports recited in the instant claims are distinguished structurally and functionally from the airflow "ports" of Zurek et al.

Additionally, even if one were to consider the air input and output ports of Zurek et al. as the first and second ports of the instant invention, the Examiner has provided no reasoning as to why one of ordinary skill in the art would be motivated to reverse the input and output ports in the thermal cycling system of Zurek et al. Zurek et al. teaches a device in which air from a heater or chiller is directed into a mixer to provide a specific desired temperature for heating or cooling a nucleic acid reaction in a sample chamber. Zurek et al. already teach an exhaust or return port 36 for diverting air back to the heater or chiller. See column 6, lines 27-28 and FIG. 2. Thus, even if for some reason one wanted to reverse the airflow direction, there is no need for reversing the input and output ports because the exhaust port provides a means for returning air to the heater or chiller.

Claim 2 recites a microcontroller coupled to the first and second ports. Zurek et al. do not appear to teach or suggest such structure. The only indication of a controller in Zurek et al. is the recitation that gate 38 is shifted to divert air from the heater or chiller into the output port or exhaust port. See column 6, lines 29-34. Zurek et al. does not appear to teach any type of controller coupled to the input and output airflow ports. Because the ports of Zurek et al. are designed for airflow, there is no motivation or suggestion for one of ordinary skill in the art to modify the device of Zurek et al. to couple a microcontroller to the airflow ports.

Claim 5 recites the first and second ports defining jack cavities configured to receive identically-shaped plugs. Zurek et al. do not appear to teach or suggest such a structure. As stated above, Zurek et al. teach airflow ports. Thus, there is no motivation for one of ordinary skill in the art to modify the airflow ports of Zurek et al. to define jack cavities configured to receive identically-shaped plugs.

For at least the reasons set forth above, Zurek et al. do not appear to teach or suggest the elements of claims 1, 2, and 5. Withdrawal of the rejection is respectfully requested.

Appl. No. 10/632,672
Response Dated April 19, 2005
Reply to Office Action mailed January 25, 2005

Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-677-9050.

Respectfully Submitted,

Date: April 19, 2005

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